

Appl. No. 09/881,709  
Amdt. Dated July 18, 2004  
Reply to Office action of September 27, 2004

### **Amendments to the Specification:**

Please replace paragraph [Abstract] with the following amended paragraph:

#### **Abstract**

A system which automatically generates individually adjusted content in order to help the user learn and maintain competence within different knowledge areas, e.g. languages. The system contains a subject database with structured content and with the use of so called phrases and a detecting function, used for e.g. analysing user interactions, the intelligence based on algorithms creates new content automatically, in any language, related to the subject database itself, the individual and for segments of all users. The created content together with the detecting function generates a knowledge database for each individual based on all interactions made by the individual and all other users of the system. The algorithms in the system then use the knowledge database and automatically communicate with each individual through a selected user terminal when the individual is available and the time is right.

Please replace paragraph [0004] with the following amended paragraph:

[0004] Various methods of utilising the Internet for education, self-studies and tests have been disclosed, as have solutions to the related problems. One example is the patent U.S. Pat. No. 5,909,589 to Parker, in which an apparatus and a method for verifying a user of a network-based application is described. The user initially has to define himself to the system, whereby data typical for the user is input, for example name and phone number. While the application is used, the system detects, in parallel, user-specific characteristics such as key depression pattern, mouse movement pattern and similar, said characteristics being stored in a database. During subsequent use of the application, a verifier provided in the system will check the user characteristics and compare them to the characteristics stored in the database, allowing the system to monitor that the correct user is utilising the application. This might for example be used for verifying the user identity during examination tests via a network. The patent does not, however, address the ~~tuition~~ content used for tuition as such.

Please replace paragraph [0007] with the following amended paragraph:

[0007] The system according to the invention, hereinafter also called the Personal Trainer, is realised in a communications network, to which a user can connect via a suitable user terminal, or via services such as word processing programs, calculation programs or the like that can be run via a user terminal. A subject database belonging to the system is connected to this network, in which database data relating to one or more specific subjects are stored. The users are given the possibility of communicating with the subject database and using the information contained therein by means of an apparatus realised by a system software being executable in units connected to the network, said apparatus being devised to handle one or several different user services. This apparatus further comprises registration means devised to

monitor, transparently for the users, all transactions they perform within a service, and for registering information about said transactions in an individual knowledge database. For example, it will be registered when and how many times a function within the service is activated, or if a question about help put by the user, has been put to the system by the user before. Said apparatus further comprises means for adaptation, in dependence of transactions registered in the knowledge database, of services to unique users. In a preferred embodiment, the system is devised to run services for individually adapted training, knowledge maintenance or for offering knowledge support, the apparatus realised by the system software being devised to adapt, in dependence of transactions registered in the knowledge database, the training/tuition content used for tuition to the user according to his/her requirements or wishes.

Please replace paragraph [0018] with the following amended paragraph:

[0018] FIG. 1 shows an overall description of the system solution for a Personal Trainer. The Personal Trainer is realised as an interactive software solution in one or several units within a communications network, and the users can be connected to the Personal Trainer by terminals. As indicated by FIG. 1, such terminals can be fixed or mobile, and the user interfaces may vary. The concept of communications network thus includes one or several different networks, and the transmission route for the communication with the software of the Personal Trainer can be selected by each user. With simultaneous reference to FIGS. 1, 2 and 3, it is evident that the software solution for the invention is based upon three basic components:

Please replace paragraph [0019] with the following amended paragraph:

[0019] 1. A subject database 4 connected to ~~a communications network 2~~ the system software 1, including phrases and a detecting function with intelligence based on algorithms. The subject database 4 comprises stored information about one or more specific subjects, said information being usable for knowledge training, knowledge maintenance and for offering knowledge support within the subject.

Please replace paragraph [0020] with the following amended paragraph:

[0020] 2. System software for using and processing of the information in the subject database 4, for the purpose of realising to the user a service regarding knowledge training, knowledge maintenance and offering knowledge support within the subject.

Please replace paragraph [0021] with the following amended paragraph:

[0021] 3. User terminals 3, connectable to the communications network 2 for utilising said services. Said communications network 2 may e.g. be the Internet or any other global network, but may also be an internal and highly limited network.

Please replace paragraph [0022] with the following amended paragraph:

[0022] The system software realises an application layer 1, or an apparatus, and several means comprised in said apparatus 1. The system software realises inter alia a processing means 5,

devised to run the actual knowledge service, e.g. ~~to give, in dependence of user questions and information from the subject database, adequate answers or information to the users giving adequate answers or information to user questions and information from the subject database~~ 3. An identification means 9 is also provided, for identifying the user to the service. The apparatus further comprises software for a personal administrator 8. The personal administrator 8 is a software-realised function that determines and controls on which terms training is to take place, and every user has control of his/her personal administrator 8. The invention is characterised by all the transactions performed by users 3 within a service being registered by a registration means 6 realised by the system software. Information about these transactions is stored individually, for each user of the registration means 6, in a knowledge database 7. Such transaction information may e.g. be whether a certain question has come up before and, if so, when and how often. In order to make the training, the knowledge maintenance, and the knowledge support offered by the service individually adapted, with the intention of rendering the learning more efficient, the processing means 5 is arranged to adapt the services through individual usage of the information registered in the knowledge database 7. The registered information is utilised for training adapted to each individual, e.g.:

Please replace paragraph [0060] with the following amended paragraph:

[0060] Interactive games on the web or in cellular communication systems, with a direct connection to tests in the Personal Trainer. Such games may help in stimulating interactive language training, ~~whilst~~ while the user is simultaneously having fun. The user may utilise different terminals when using interactive games, such as personal computers, TV, PDA, mobile phones, etc.

Please replace paragraph [0075] with the following amended paragraph:

[0075] Said processing means is arranged to perform, within said service, various actions, including sending questions, answers or examinations within said subject to said user, or receiving questions or answers within said subject from said user, in accordance with what has been described earlier. According to the invention, the processing means is arranged to adapt the degree of difficulty of such questions and examinations in dependence of the data registered in said knowledge database for said user. In a preferred embodiment, the knowledge database is built up by said registration means registering all the transactions performed by the user within the service. Such transactions may ~~e.g.~~ be questions or answers to the system, or examination results. For a specific stage within said subject, e.g. spelling, the processing means is arranged to investigate data stored in the knowledge database regarding this stage, and to adapt the action correspondingly. For example, the processing means may provide spelling tasks more often that include the words with which the user in question has difficulties, according to the documentation in the database. In another embodiment, said registration means is arranged to detect errors, e.g. faulty spelling, directly in the answers from the user, and to register information about said errors in the knowledge database, whereby said processing means is arranged to design said training programs in dependence of information stored in the knowledge database.